

**UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS**

IN RE PHARMACEUTICAL INDUSTRY  
AVERAGE WHOLESALE PRICE LITIGATION

MDL No. 1456

THIS DOCUMENT RELATES TO:  
  
ASTRAZENECA TRIAL

CIVIL ACTION: 01-CV-12257-PBS

Judge Patti B. Saris

**AMENDED WRITTEN TUTORIAL OF DR. MEREDITH ROSENTHAL TO  
REFLECT MATTERS RELEVANT TO ASTRAZENECA AND CLASS 1 ONLY**

## BIOGRAPHICAL SKETCH

1. Before I turn to substance let me tell you a little about my background. I am currently an Associate Professor of Health Economics and Policy at the Harvard School of Public Health.<sup>1</sup> At the School of Public Health, I teach Health Economics to graduate students and spend the remainder of my time working on grant-funded research projects.

2. I received a Ph.D. in the Economics Track of the Health Policy program at Harvard. My training at Harvard covered both economic theory and empirical methods and the substantive areas of public health and health policy.

3. A major area of my research has been the economics of the pharmaceutical industry. With several of my colleagues at Harvard and Professor Berndt at the Massachusetts Institute of Technology, I examined trends in direct-to-consumer advertising of prescription drugs and its impact on consumer demand. We published several peer-reviewed papers and reports on those findings. I have also been interested in pharmacy benefit design, both from the perspective of Medicare reform and private-sector efforts to reduce pharmaceutical spending or improve the value of dollars spent. In this line of research, I am currently working on an evaluation of tiered formularies in managed care to see what impact they have on spending and use of pharmaceuticals.

4. The other major area of my research that is relevant to this case is the economics of incentives. In particular, I have examined the financial incentives created by different physician payment systems and how they affect treatment choices and other behavior.

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<sup>1</sup> My curriculum vita is attached as Exhibit 1.

5. From 1997 to the present, I have been a referee for the *Journal Of Health Economics*, *Health Affairs*, and *Health Services Research*, among others, all of which feature frequent articles on the pharmaceutical industry and pharmacy benefit management.

6. In connection with this case, I have analyzed the distribution of pharmaceutical products, the role of AWP generally in drug pricing/reimbursement, and the incentives that might give rise to the specific allegations of abuse of AWP-based reimbursements. I first looked to the scientific literature and industry press for evidence on the economic relationships in the market and how payments flow through the distribution chain. I then reviewed contracts between PBMs and third-party payors and health and welfare funds, PBM contracts and pharmacies, third-party payors and physicians, and PBMs and manufacturers. I also examined discovery materials relating to the use of AWP for reimbursement and for strategic purposes. Finally, I reviewed a large number of data analyses that were produced in the case using manufacturer invoice and insurance claims data to illuminate the interrelationships among actual sales prices, Medicare and private third-party reimbursement, and list prices over time for Zoladex.

## **MEDICARE PART B**

7. Let me start with a description of the Medicare Part B Program. I start there because Medicare's adoption of AWP for reimbursement is prescribed by regulation and statute.

8. Currently (and during the Class Period, with only some relatively small variations), Medicare Part B generally covers drugs that are "incident to" a physician's service, durable medical equipment (DME) drugs, and drugs specifically covered by statute (for example, oral immunosuppressive drugs). Drugs that fall under the category of "incident to a physician's

service” include drugs that cannot be self-administered such as injectable and intravenous agents for cancer, rheumatoid arthritis, and nausea. With respect to AstraZeneca, the drug Zoladex, which is administered by injection, falls into this category.

## **WHO IS IN CLASS 1?**

9. Let me pause a moment to describe who are members of Class 1.

10. For a Medicare Part B covered drug, 80% of the cost is paid for by the federal government and 20% is paid for by whoever is responsible for the co-payment (technically “coinsurance”). Any consumer that paid all or a portion of the 20% coinsurance is a member of Class 1.

11. An individual Medicare recipient may have supplemental insurance coverage and whichever insurer provides that coverage will then pay the 20% coinsurance. There are more than four million Medicare beneficiaries, however, who do not have supplemental insurance coverage and must pay their own coinsurance for Part B covered drugs.<sup>2</sup> Even for those persons who have some form of coverage for the Medicare Part B coinsurance, features of that coverage may well result in the individual becoming obligated to pay some portion of the coinsurance. That is, some beneficiaries with supplemental coverage pay a share – for example 20% -- of the 20% coinsurance that Medicare Part B requires.

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<sup>2</sup> See Distribution of Supplementary Insurance for the Medicare population, attached hereto as Exhibit 2.

**DURING THE CLASS PERIOD, AWP IS THE PART B PRICING BENCHMARK**

12. The Medicare program was established in 1965 as an amendment to the Social Security Program. Medicare provides health insurance to persons age 65 and older, to qualifying persons under 65 with disabilities, and to persons of any age suffering from permanent kidney failure. Medicare is the nation's largest health insurance program, covering over 39 million people in 2003. It is composed of three parts, a Hospital Insurance Program (Part A), the Supplementary Medical Insurance Program (Part B), and a managed care program (Part C, also called "Medicare Plus Choice" or "Medicare Advantage") that offers enrollees the opportunity to join a commercial health plan instead of receiving coverage through Parts A and B. Part B, which primarily covers physician services, is optional and has a monthly premium requirement. Most Medicare eligibles choose to enroll in Part B and either pay the premium themselves or have it covered by Medicaid or private supplemental coverage. Medicare coverage is subject to deductibles and a 20 percent coinsurance requirement.

13. When Medicare was designed in 1965, it was modeled on the major medical plans then popular in the private sector, which were primarily intended to cover catastrophic health care costs with substantial cost sharing at the front end (*i.e.*, deductibles and coinsurance). In addition, Medicare, like most employer-sponsored plans in 1965, did not offer routine coverage for outpatient prescription drugs. A small group of specialty drugs, however, was and is covered under Medicare Part B. Typically these drugs are administered by physicians in the office setting or in hospital outpatient departments, but some self-administered drugs are also covered.<sup>3</sup>

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<sup>3</sup> Currently, those drugs that "are not usually self-administered by the patient" are covered under Medicare Part B. Until December 2000, when Congress amended the statutory standard, covered drugs included "those that cannot be self-administered." See §112 of the Medicare, Medicaid and SCHIP Benefits Improvement and Protection Act ("BIPA"). In addition, the Centers for Medicare and Medicaid Services ("CMS") has issued Program Memoranda with guidance for how the new BIPA standard should be implemented (PM AB 02-139).

Prior to 2005, reimbursement for prescription drugs under Part B in the Medicare program was based on the Average Wholesale Price (“AWP”)<sup>4</sup> reported by drug manufacturers and published in the standard directories (Red Book, First Databank (Blue Book) and Medispan). While the precise formula for AWP-based reimbursement has changed over time, reliance on AWP was a constant throughout the Class period.

14. More specifically, the Social Security Act Amendments of 1965 (P.L. 89-97) explicitly links reimbursement to cost as follows:

“The amount paid to any provider of services with respect to services for which payment may be made ... shall ... be the reasonable cost of such services...”<sup>5</sup>

15. The original intent of Congress was to pay a reasonable amount to providers for the care of Medicare patients.<sup>6</sup> In a 1995 article, Robert Ball, who served as commissioner of Social Security under Presidents Kennedy, Johnson, and Nixon, provides an insider’s insights concerning the intentions of Medicare legislators.<sup>7</sup> In connection with drugs administered in hospitals, he states that:

“By and large, our posture at the beginning was one of paying full costs and not intervening very much in how hospitals, at least the better ones, conduct their business ... We believed in paying fully. We opposed shifting costs to other payers, and we avoided discounts beyond what our contractors might have secured for their

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<sup>4</sup> “Apparently from the beginning of the program, Medicare has based payment for drugs on published ‘average wholesale price’ (AWP). AWP is used throughout public and private insurance programs as the basis for drug reimbursement, both for drugs administered in physician offices and for drugs dispensed by pharmacies. The amount of reimbursement varies from plan to plan and setting to setting, but it is almost always expressed as a percentage of AWP.” American Society of Clinical Oncology (ASCO), *Reform of the Medicare Payment Methods for Cancer Chemotherapy*, May 2001, p. 5.

<sup>5</sup> In connection with hospital inpatient expenses, *see* § 1813 (b) of the Social Security Act Amendments of 1965 (“Medicare”). In connection to supplementary benefits of the Act, it is stated in Part B § 1833 (a) that “... there shall be paid ... [for] each individual who is covered ... amounts equal to ... 80 percent of reasonable charges...”

<sup>6</sup> Beck, D. F., 1984, *Principles of Reimbursement in Health Care*, Aspen Publication, Rockville, MD, p. 3.

<sup>7</sup> Ball, R.M., 1995, *What Medicare’s Architects Had in Mind*, HEALTH AFFAIRS, 14(4), pp. 62-72. The specific quotes that follow in this paragraph are found on pp. 68-69.

own insured persons ... We were willing to allow a *somewhat* higher reimbursement rate for nursing the elderly...” (Emphasis added.)

In connection with drugs administered in a physician’s office, he states that:

“Reimbursement was to be a ‘reasonable’ charge determined by the customary charges of the particular physician and the prevailing charges in the locality for similar services.”

16. Prior to January 1, 1998, Medicare carriers were to determine the allowed amount for a covered drug based on the lower of the Estimated Acquisition Cost (“EAC”) or 100% of the national AWP for that drug. The EAC was to be determined based on a survey of actual invoice prices paid for the drug and thus designed to represent the actual cost (or “usual and customary charges”) of drugs for direct purchasers (the providers, in the case of Medicare Part B).

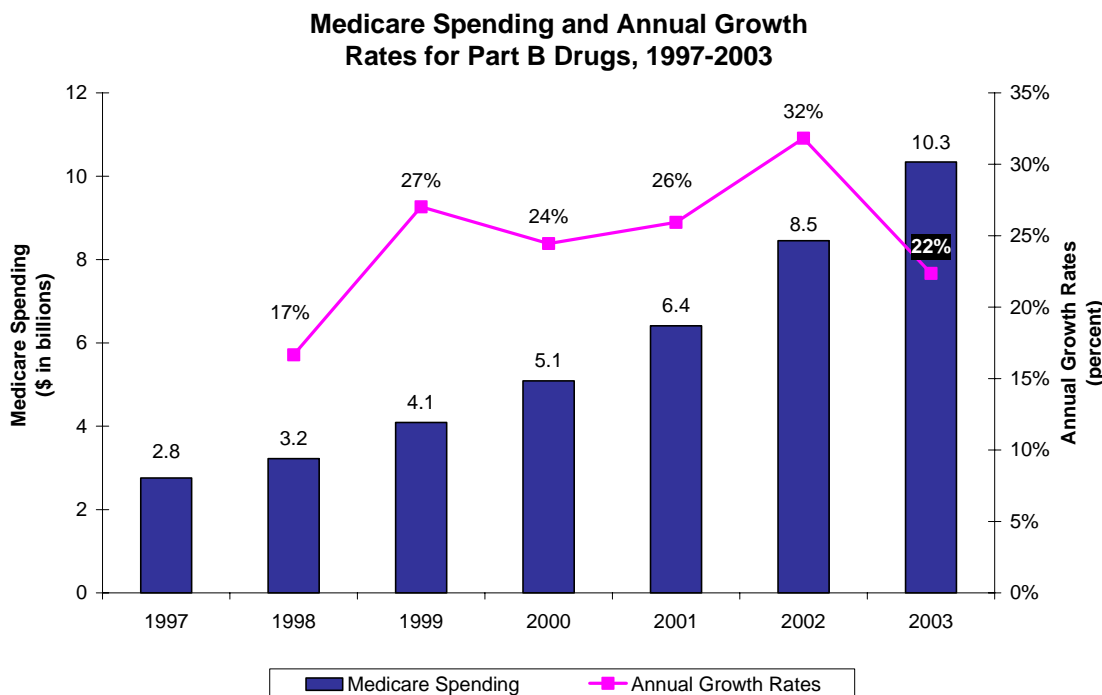
17. Historically, however, Medicare carriers have not conducted such surveys and have based reimbursement on AWP.<sup>8</sup> Furthermore, on January 1, 1998, 42 C.F.R. § 405.517 was amended so that the allowed amount would be based on the lower of the billed charge on the Medicare claim form or 95% of AWP. In practice, this has meant that the majority of reimbursement during the Class Period was undertaken using the AWP.

18. As with other sectors, there has been rapid growth in Medicare Part B drug expenditures. Analysis of the sources of this growth reveals that only a few of the approximately 450 covered drugs account for most of the spending. Medicare drug expenditures in 1998 were about \$3.2 billion and this amount grew to more than \$8.5 billion by 2002.<sup>9</sup> During the same period (1998 to 2002), Medicare enrollment grew only 1.4 percent per year while drug spending grew an average of 25 percent per year. The vast majority (77%) of the Medicare Part B drug

<sup>8</sup> See “Excessive Medicare Payments for Prescription Drugs,” Office of Inspector General, Department of Health and Human Services, December 1997, OEI-03-97-00290, p. i.

<sup>9</sup> See MedPAC, “Medicare Part B Drugs and Oncology,” July 13, 2006. See also Department of Health and Human Services, Center for Medicare and Medicaid Services, “Medicare Program; Payment Reform for Part B Drugs; Proposed Rule,” Federal Register, Aug. 20, 2003, 50428-52.

expense is paid to oncologists and urologists. The spending on drugs under Medicare Part B is highly concentrated with seven of the approximately 450 drugs accounting for approximately 48 percent of the spending (\$4.0 billion out of \$8.5 billion). Nineteen drugs accounted for 75 percent of the total drug expenditures and 33 drugs accounted for 86 percent of the total. Both drug product price increases at the manufacturer level and increases in utilization appear to have been the major contributors to growth in drug expenditures for the Medicare Part B program.<sup>10</sup>



Source: MedPAC, "Medicare Part B Drugs and Oncology," July 13, 2006, Chart 1.

## INCENTIVES CREATED BY PART B AWP REIMBURSEMENT

19. If physicians' profits are a function of quantities administered and the spread between the AWP and the transaction price, manufacturers' profits are a function of quantities administered and the margin between transaction prices and costs. Thus, a manufacturers'

<sup>10</sup> *Medicare and Medicaid Drug Pricing: Strategy to Determine Market Prices*, pp. 8-9.



rational economic response in this setting is to set transaction prices to be profit maximizing and set AWP as high as possible to increase physician profits and thereby the demand for their drug.

20. In the marketplace for Part B coverage, the use of AWP as a fixed reimbursement amount can provide incentives to abuse the AWP-based reimbursement structure through marketing of the spread to physicians in order to influence physician usage for a particular drug.

21. An example of how the AWP-based reimbursement system can be subject to abuse can be shown through some examples of how drug companies have actually conducted business in the AWP-based system in the Part B context.

22. A document produced by AstraZeneca has a blunt reference to this incentive:

“The market we are in wants a more expensive Zoladex, because the doctor can make more money.”<sup>11</sup>

23. What such documents show, and there are many others I could display, is the recognition by drug companies of the ability to increase Part B market share using the disparity between AWP and acquisition cost.

#### **THERE IS LITTLE OR NO VARIATION IN THE RELIANCE ON AWP FOR PART B COVERED DRUG REIMBURSEMENT**

24. In the Part B context in particular, in my opinion, virtually all transactions are based on AWP by statute. If AWP has been artificially inflated, standard econometric techniques and analysis can be employed to measure the impact of that inflation on a class-wide basis.

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<sup>11</sup> AZ 0021838 (Plaintiffs’ Exhibit 117), attached hereto as Exhibit 3; *see also* AZ 0037018-19 (Plaintiffs’ Exhibit 187) referring to capturing more accounts due to an increase in the discount, attached as Exhibit 4.

## **ROLE OF PUBLISHERS**

25. Let me explain how AWP is transmitted to the marketplace.

26. In all instances the AWP is established by the manufacturers either directly or indirectly. In the direct approach, a manufacturer sends an AWP or suggested AWP to a publisher. In the indirect approach, manufacturers report the Wholesale Acquisition Cost (WAC) and publishers compute the AWP based on a predetermined mark up.

27. Those AWP's are then published by the publisher, either with modification or without, but the publisher always seeks verification from the company prior to publishing an AWP. There is regular communication back and forth between drug companies and the publishers regarding AWP.

## **POTENTIAL FOR LACK OF TRANSPARENCY**

28. Because the AWP-based system of pharmaceutical reimbursement is based on the voluntary and fair reporting of AWP's by drug makers, the system has the potential for abuse and lack of transparency.

29. The actual acquisition cost ("AAC") of a drug is known by each drug manufacturer, but is not published or made public. The AAC is the cost to the provider, or doctor who administers Zoladex.

30. Some drug manufacturers may have a variety of terms for specific discounts that are based on class of trade, volume of purchase, market share movement, preferred formulary status, terms of payment, and other criteria. The average sales price ("ASP") is meant to be the net price after all forms of discount, rebate, purchasing allowances or any other forms of economic consideration have been taken into account.

31. Because drug manufacturers consider the discounts proprietary and confidential, the relationship of AAC or ASP to either AWP or WAC was not predictable from public data sources in general, or for specific classes of trade until a recent Medicare reform that required manufacturers to report ASP.

32. In the Medicare Part B context, it appears that abuse was perceived to be sufficiently rampant that Congress passed the Medicare Modernization Act of 2003. Among other things, Congress changed the basis of reimbursement for Medicare Part B drugs; to simplify, Congress required the phasing in of a new, ASP-based, system to replace the AWP system. Medicare Part B drug and biological reimbursements are now based on a mathematically calculated ASP plus 6%, where ASP is defined by statute and reported by manufacturers to the government on a quarterly basis.

#### **SUMMARY OF THE IMPORTANCE OF AWP**

33. AWP is the reference point for pharmaceutical reimbursement rates. Until the Medicare Modernization Act of 2003 altered Medicare reimbursement, all or substantially all reimbursement rates for pharmaceuticals purchased under public sector and private drug benefit insurance plans were negotiated based upon AWP. This is true for physician-administered drugs and for self-administered drugs. By definition, as well as by the actual way in which the industry works, AWP is the glue that binds these Class members together.

I declare that the foregoing is true and correct under penalty of perjury.

/s/ Meredith Rosenthal  
Meredith Rosenthal, Ph.D.

March 16, 2007 Cambridge, MA  
Date and Place of Execution

**Exhibit 1**

*Meredith Rosenthal Curriculum Vitae*

**CURRICULUM VITAE**

February, 2007

**MEREDITH B. ROSENTHAL**

677 Huntington Avenue  
Boston, MA 02115  
(617) 432-3418

**DATE & PLACE OF BIRTH:**

5/7/68 Boston, MA

**EDUCATION:**

1998 Health Policy (Economics track), Ph.D., Harvard University  
1990 International Relations, A.B., Brown University

**ACADEMIC APPOINTMENTS**

1998- Associate Professor of Health Economics and Policy  
Department of Health Policy and Management  
Harvard School of Public Health

**OTHER PROFESSIONAL EXPERIENCE:**

1993-1994 Analyst, Health Economics Research, Inc./The Center for Health  
Economics Research  
1990-1993 Consultant, Price Waterhouse, Tax Economics Department

**PROFESSIONAL SOCIETIES:**

1995-present Member: AcademyHealth, American Public Health Association,  
International Health Economics Association, American Society of Health  
Economists

**PUBLIC SERVICE**

2001 Chair, Massachusetts Special Commission on Physician Compensation  
2003 Expert Testimony, Senate Special Committee on Aging, Hearing on  
Direct to Consumer Advertising of Prescription Drugs: Exploring the  
Consequences  
2005 Expert Testimony, House Committee on Education and Workforce, House  
Subcommittee on Employer-Employee Relations, Hearing on Examining  
Pay-for-Performance Measures and Other Trends in Employer-Sponsored  
Health Care

**AWARDS**

2003 Labelle Lectureship in Health Policy, McMaster University  
2006 Alfred P. Sloan Foundation Industry Studies Fellowship

MAJOR ADMINISTRATIVE RESPONSIBILITIES:

2000-present      Committee on Higher Degrees in Health Policy, Harvard University  
1998-present      Admissions Committee, Ph.D. Program in Health Policy, Harvard University

EDITORIAL ACTIVITIES:

1997-1998      Assistant Editor, Evidence-based Health Policy and Management  
1997-present      Referee: *Journal of Health Economics, Inquiry, Health Services Research, Health Affairs, Journal of the American Medical Association*

MAJOR RESEARCH INTERESTS:

Financial incentives for physicians  
Economics of the pharmaceutical industry  
Pay-for-performance in health care  
Consumer-directed health plans  
Behavioral health

TEACHING EXPERIENCE:

1999              Health Policy and Management 507: Mental Health Economics and Policy in the United States

2003-present      Health Policy and Management 209: Economics of Health Policy

RECENT WRITTEN AND ORAL TESTIMONY:

*IBEW - NECA Local 505 Health & Welfare Plan and Joanne C. Gaddy v. SmithKline Beecham Corporation, and GlaxoSmithKline, plc*, United States District Court for the Eastern District of Pennsylvania.

*In re Augmentin Antitrust Litigation*, No. 02-CV-442, United States District Court for the Eastern District of Virginia.

*In re Lupron Marketing and Sales Practices Litigation*, United States District Court, District of Massachusetts, MDL No. 1430, CA No. 01-CV-10861.

*In re Pharmaceutical Industry Average Wholesale Price Litigation*, United States District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS

*In re Neurontin Marketing and Sales Practices Litigation*, MDL No. 1629, Master File No. 04-10981, United States District Court, District of Massachusetts.

*Gregory Clark and Linda Meashey vs. Pfizer Inc., and Warner-Lambert Company*, Court of Common Pleas, Philadelphia County, No. 001819.

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2. Rosenthal MB. Risk Sharing and Delegation in Managed Behavioral Health Care, *Health Affairs*, 18(5): 204-13, (September/October), 1999.
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5. Cutler DM, Epstein AM, Frank RG, Hartman RS, King C, Newhouse JP, Rosenthal MB, and Vgidor ER. How Good a Deal Was the Tobacco Settlement? Assessing Payments to Massachusetts, *Journal of Risk and Uncertainty*, 21 (2/3): 235-61, 2000.
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12. Rosenthal MB, Frank RG, Buchanan JL, and Epstein AM. Transmission of Financial Incentives to Physicians by Intermediary Organizations in California, *Health Affairs*, 21(4):197-205, July-August, 2002.
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15. Rosenthal MB, Hsuan C. and Milstein A. Awakening Consumer Stewardship of Health Benefits: Prevalence and Differentiation of New Health Plan Models. *Health Services Research*, 39(4): 1055-1070, August 2004.
16. Donohue JM, Berndt ER, Rosenthal MB, Epstein AM, and Frank RG. Effects of Pharmaceutical Promotion on Adherence to Guideline Treatment of Depression. *Medical Care*, 42(12):1176-85, December 2004.
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18. Rosenthal MB, Frank RG, Li Z, and Epstein AM. From Concept to Practice: Early Experience with Pay-for-Performance. *JAMA*, 294(14): 1788-93, October 12, 2005.
19. Rosenthal MB, Hsuan C. and Milstein A. A Report Card on the Freshman Class of Consumer-directed Health Plans. *Health Affairs*, 24(6):1592-1600, November-December, 2005.
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23. Rosenthal MB and Daniels NB. Beyond Competition: the Normative Implications of Consumer-Driven Health Plans. *Journal of Health Politics, Policy, and Law*. 2006;31(3):671-686.
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25. Mehrotra A, Epstein AM, Rosenthal MB. Do Integrated Medical Groups Provide Higher Quality Care than IPAs? *Annals of Internal Medicine*, 145:826-33, December 5, 2006.

26. Rosenthal MB and Dudley RA. Pay-for-Performance: Will the Latest Payment Trend Improve Care? *Journal of the American Medical Association*, 297(7):740-43, February 21, 2007.

#### Essays

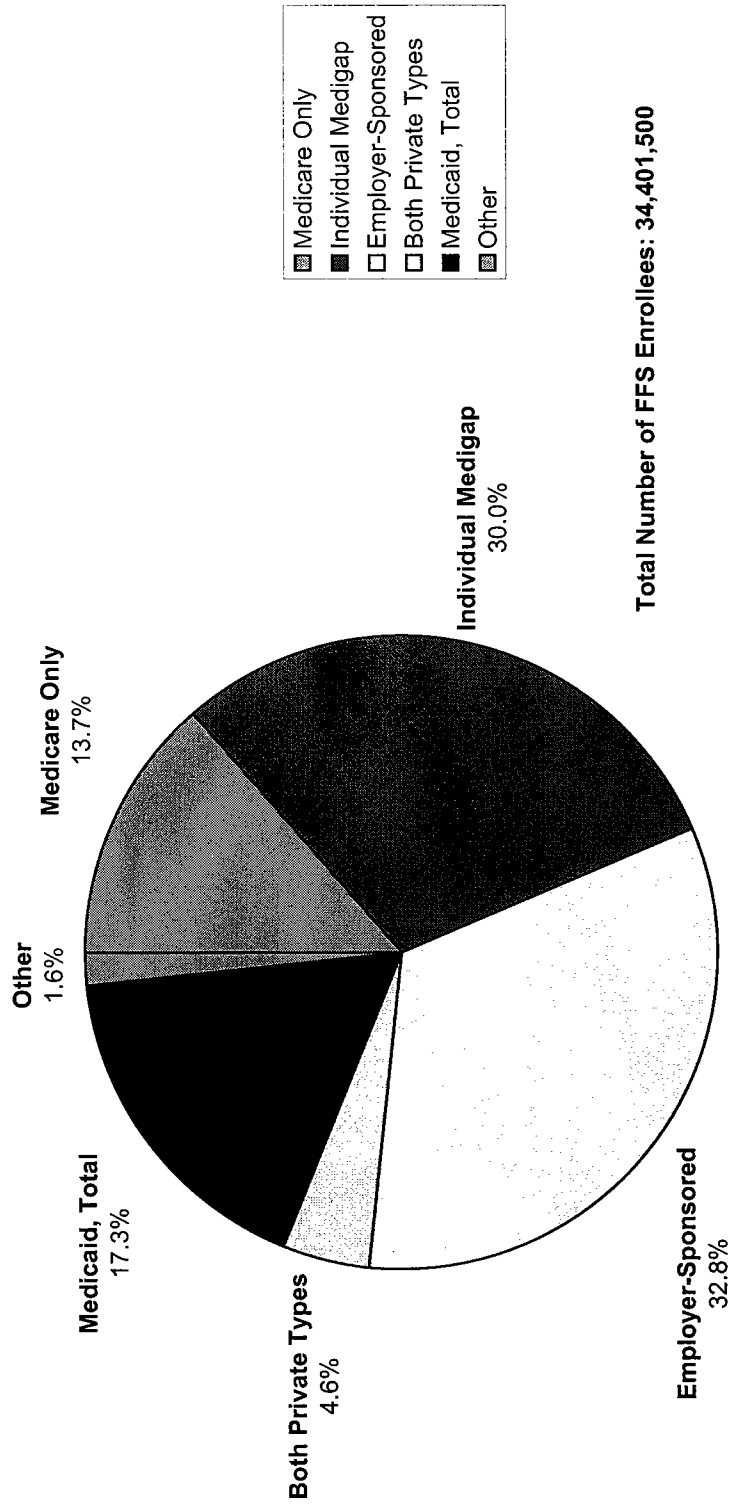
1. Rosenthal MB. Provider Reimbursement in the Twenty-first Century. *Oncology Economics*, 1;2000.
2. Rosenthal MB. Commentary on The economics of direct-to-consumer advertising of prescription-only drugs: prescribed to improve consumer welfare? *Journal of Health Services Research and Policy*, 8; 2003.

#### Book Chapters

1. Rosenthal MB, Berndt ER, Donohue JM, Epstein AM, Frank RG. Demand Effects of Recent Changes in Prescription Drug Promotion. In Frontiers in Health Policy Research, v. 6, David M. Cutler and Alan M. Garber, editors, MIT Press. June 2003.
2. Rosenthal MB, Donohue JM. Direct-to-Consumer Advertising of Prescription Drugs: A Policy Dilemma. In Ethics, Public Policy, and the Pharmaceutical Industry in the 21st Century, ed. M. Santoro, Cambridge University Press. Forthcoming.

**Exhibit 2**

# **Distribution of Supplementary Health Insurance for the Medicare Population, 1996** **Fee-for-Service Enrollees**



Source: 1996 Medicare Current Beneficiary Survey. As cited in Eppig and Chulis, "Trends in Medicare Supplementary Insurance: 1992-1996," *Health Care Financing Review*, 19(1), Fall 1997, Table 1, p. 202.

**Exhibit 3**

INTERNAL MEMORANDUM

Date: 12-Oct-1995 02:35pm EDT ZENECA PHARMACEUTICALS -  
PRIM CARE/SPEC PROD - ONCOLOGY/ENDOCRIN  
\* To: Keith E. Patterson  
From: Thomas M. Chen CC: Mark L. Reisenauer  
Subject: Price Increase for Zoladex  
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Keith,

Here are some recommendations for a price increase on Zoladex:

1. We take a price increase in December 1995. By doing this, we can inform the Red Book of this increase and it will go into the Red Book for January 1996. This is critical, so that the state medicare carriers can recognize our new price in January. Typically, the state carriers use the January Red Book and the July Red Book for their reimbursement price of medicare reimbursed products. Last year when we took the price increase in February there were some Medicare carriers who did not change their reimbursement price until September. Also TAP notifies Red Book 1 month before the price change. We are at a competitive advantage with our audience.

2. If we are unable to take a price increase until 1996, I recommend that we take the price increase in January 1996 and inform the Red Book of the pending price change in December 1995, so that the price increase is notated in the January Red Book.

The percentage increase is another major consideration based on the following factors:

1. How we price the 1 month Zoladex will affect the price of our 3 month depot and the 3 month pricing if we use the 1 month as the gauge.
2. The market we are in wants a more expensive Zoladex, because the doctor can make more money.

We need to move on this issue, so that we can have everything in place by the end of the year and also notify NSS of how we will handle any buy ins by our audience.

TOM

01-13-1145

HIGHLY CONFIDENTIAL

AZ0021838

**Exhibit 4**

I -95

TO: SPECIALTY CARE REPRESENTATIVES      DATE: MARCH 22, 1995

FROM: ONCOLOGY SPECIALTY MARKETING TEAM

SUBJECT: NEW CASE QUANTITY DISCOUNT

CC: REGIONAL BUSINESS DIRECTORS  
 REGIONAL BUSINESS MANAGERS-SPECIALTY CARE  
 DISTRICT BUSINESS MANAGERS--SPECIALTY CARE  
 FEDERAL ACCOUNT DIRECTORS  
 NATIONAL ACCOUNT MANAGERS  
 CORPORATE ACCOUNT DIRECTORS  
 GPO DIRECTORS  
 M. BONNEY  
 E. HEISEY

The Oncology Marketing team is pleased to announce a NEW CASE QUANTITY DISCOUNT for ZOLADEX® (goserelin acetate implant). There are now two additional price breaks at 60-72 units and 72 or more units. This exciting new development will help you capture the larger Lupron-using accounts in your territory.

The pricing for ZOLADEX is as follows:

## ZOLADEX PRICING STRUCTURE

UNITS	AWP	COST	DISC	LESS 2%	PROFIT W/O 2%	PROFIT W/ 2%
1-5	\$358.55	\$286.84	0%	\$281.10	\$ 71.71	\$ 77.45
6-11	\$358.55	\$269.63	6%	\$264.24	\$ 88.92	\$ 94.31
12-23	\$358.55	\$261.02	9%	\$255.80	\$ 97.53	\$102.65
24-47	\$358.55	\$252.42	12%	\$247.37	\$106.13	\$111.18
48-59	\$358.55	\$243.81	15%	\$238.93	\$114.74	\$119.62
60-71	\$358.55	\$235.21	18%	\$230.50	\$123.34	\$128.05
72+	\$358.55	\$229.47	20%	\$224.88	\$129.08	\$133.67

## LUPRON PRICING SCHEDULE

UNITS	AWP	COST	DISCOUNT	PROFIT
1-11	\$477.50	\$382.00	0%	\$ 95.50
12-23	\$477.50	\$370.50	3%	\$107.00
24-47	\$477.50	\$363.00	5%	\$114.50
48-100	\$477.50	\$355.50	7%	\$122.00
101+	\$477.50	\$344.00	10%	\$133.50

01-20-0683

HIGHLY CONFIDENTIAL

AZ0037018



This new pricing is effective March 23, 1995 at 8:00 a.m. EST

KEY POINTS TO SELL.

1. Physicians can begin to realize the deepest discount at only 72 depots vs. Lupron's 101+.
2. With a purchase of 72+ depots of ZOLADEX and the additional 2% for paying within 30 days yields the doctor a \$133.67 profit margin with ZOLADEX vs \$133.50 with a purchase of 101+ depots of Lupron. For those offices that purchase between 60-100 depots of Lupron monthly, they can increase their profit margin greatly by purchasing ZOLADEX.
3. With managed care and capitation coming why not use ZOLADEX, with less of an acquisition cost and greater profit for the 72+ depot practices. This positioning will better help to market your practice to managed care and save their patient money.
4. With ZOLADEX the Return on investment is substantially greater than Lupron as shown in the above chart.

These new discount levels will allow you the playing field in the LHRH market and to obtain some of the larger LHRH accounts in your territory. Please begin calling on your largest Lupron accounts on your next field day so that we can begin to reap the profits of this program.

We would like you to contact all of your accounts on your "Go Get 'Em" list by April 14, 1995.

This new discount program is effective March 23, 1995, and no previous purchases will be considered for additional discounts. There will be no exceptions.

If you have any questions, please contact your District Manager.

Good Selling!

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